

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal626gms

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 Feb 24 PCTGEN now available on STN
NEWS 4 Feb 24 TEMA now available on STN
NEWS 5 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 6 Feb 26 PCTFULL now contains images
NEWS 7 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 8 Mar 24 PATDPAFULL now available on STN
NEWS 9 Mar 24 Additional information for trade-named substances without
structures available in REGISTRY
NEWS 10 Apr 11 Display formats in DGENE enhanced
NEWS 11 Apr 14 MEDLINE Reload
NEWS 12 Apr 17 Polymer searching in REGISTRY enhanced
NEWS 13 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14 Apr 21 New current-awareness alert (SDI) frequency in
WPIDS/WPINDEX/WPIX
NEWS 15 Apr 28 RDISCLOSURE now available on STN
NEWS 16 May 05 Pharmacokinetic information and systematic chemical names
added to PHAR
NEWS 17 May 15 MEDLINE file segment of TOXCENTER reloaded
NEWS 18 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 19 May 19 Simultaneous left and right truncation added to WSCA
NEWS 20 May 19 RAPRA enhanced with new search field, simultaneous left and
right truncation
NEWS 21 Jun 06 Simultaneous left and right truncation added to CBNB
NEWS 22 Jun 06 PASCAL enhanced with additional data
NEWS 23 Jun 20 2003 edition of the FSTA Thesaurus is now available
NEWS 24 Jun 25 HSDB has been reloaded
NEWS 25 Jul 16 Data from 1960-1976 added to RDISCLOSURE
NEWS 26 Jul 21 Identification of STN records implemented
NEWS 27 Jul 21 Polymer class term count added to REGISTRY
NEWS 28 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
Right Truncation available
NEWS 29 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
August 1, 2003

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:16:08 ON 13 AUG 2003

=> FIL REGISTRY
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 10:16:22 ON 13 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 AUG 2003 HIGHEST RN 565411-31-6
DICTIONARY FILE UPDATES: 12 AUG 2003 HIGHEST RN 565411-31-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

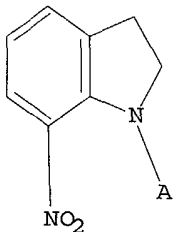
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>
Uploading 09936975.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

13/08/2003Page 3 10:20 <golam shameen 08/13/2003

SAMPLE SEARCH INITIATED 10:16:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 91 TO ITERATE

100.0% PROCESSED 91 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1248 TO 2392
PROJECTED ANSWERS: 9 TO 360

L2 9 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 10:16:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1852 TO ITERATE

100.0% PROCESSED 1852 ITERATIONS 158 ANSWERS
SEARCH TIME: 00.00.01

L3 158 SEA SSS FUL L1

=> s l3
SAMPLE SEARCH INITIATED 10:16:51 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 91 TO ITERATE

100.0% PROCESSED 91 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1248 TO 2392
PROJECTED ANSWERS: 9 TO 360

L4 9 SEA SSS SAM L1

=> FIL CAPLUS
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 148.15 148.36

FILE 'CAPLUS' ENTERED AT 10:16:58 ON 13 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Aug 2003 VOL 139 ISS 7
FILE LAST UPDATED: 12 Aug 2003 (20030812/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L5

74 L3

=> s 15 and amino(w)acid?

939778 AMINO

43 AMINOS

939796 AMINO

(AMINO OR AMINOS)

4337168 ACID?

591117 AMINO(W)ACID?

L6

12 L5 AND AMINO(W)ACID?

=> s 16 and glycine

127931 GLYCINE

1650 GLYCINES

128626 GLYCINE

(GLYCINE OR GLYCINES)

L7

4 L6 AND GLYCINE

=> s 16 and GABA

33619 GABA

11 GABAS

33622 GABA

(GABA OR GABAS)

L8

3 L6 AND GABA

=> d 18 ibib abs hitstr tot

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:814100 CAPLUS

DOCUMENT NUMBER: 137:325331

TITLE: Preparation of 7-nitroindoline derivatives for use as photochemical precursors capable of releasing bioactive effector moieties

INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002083639 | A1 | 20021024 | WO 2002-GB971 | 20020308 |

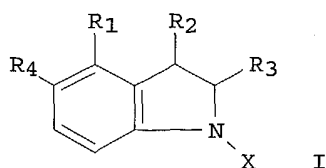
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-9093 A 20010411

OTHER SOURCE(S): CASREACT 137:325331; MARPAT 137:325331

GI



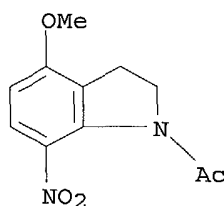
AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl4 to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 295325-60-9 CAPLUS

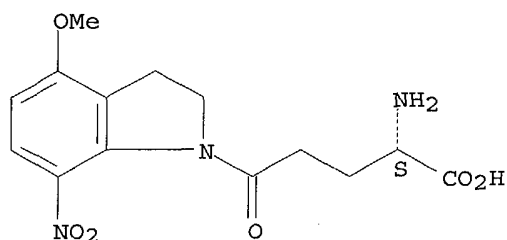
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



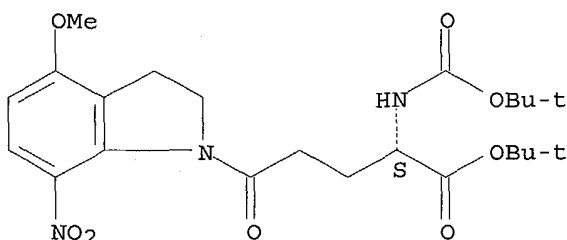
IT 444189-55-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and

acetic anhydride)
RN 444189-55-3 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-
2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester,
(.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:759359 CAPLUS
DOCUMENT NUMBER: 136:210906
TITLE: Photochemical and pharmacological evaluation of
7-nitroindolyl- and 4-methoxy-7-nitroindolyl-
amino acids as novel, fast caged
neurotransmitters
AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J.
E. T.; Ogden, D.
CORPORATE SOURCE: National Institute for Medical Research, London, NW7
1AA, UK
SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42
CODEN: JNMEDT; ISSN: 0165-0270
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Reagents capable of rapid and efficient release of neuroactive
amino acids (L-glutamate, **GABA** and glycine)
upon flash photolysis of thermally stable, inert precursors have been
elusive. 7-Nitroindolyl (NI)-caged and 4-methoxy-7-nitroindolyl
(MNI)-caged compds. that fulfil these criteria are evaluated here. These
caged precursors are highly resistant to hydrolysis. Photolysis is fast
(half time.1toreq.0.26 ms) and the conversion achieved with a xenon
flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the
MNI-caged L-glutamate. A procedure is described for calibration of
photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself
showed no agonist or antagonist effects on AMPA and NMDA receptors in
cultured neurons, and had no effect on climbing fiber activation of
Purkinje neurons. A control compd. with identical photochem. that
generated an inert phosphate upon photolysis was used to confirm that the
intermediates and byproducts of photolysis have no deleterious effects.
MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and
similarly inert at glutamate receptors, but about 2.5 times more
efficient. However, NI-caged **GABA** is an antagonist at GABAA
receptors and NI-glycine an antagonist at glycine receptors. The results
show the utility and limitations of these fast and stable caged
neurotransmitters in the investigation of synaptic processes.

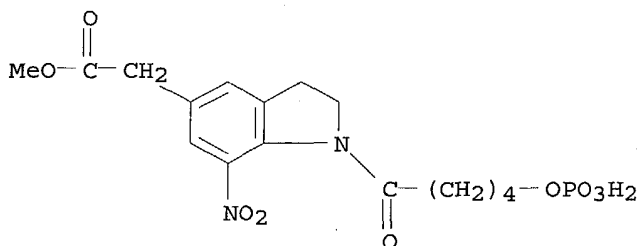
IT 239135-33-2 239135-34-1 295325-62-1

RL: BSU (Biological study, unclassified); BUU (Biological use,
unclassified); CPS (Chemical process); PEP (Physical, engineering or
chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

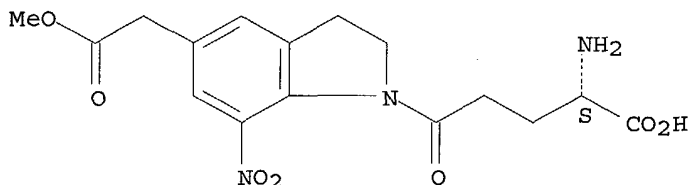
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

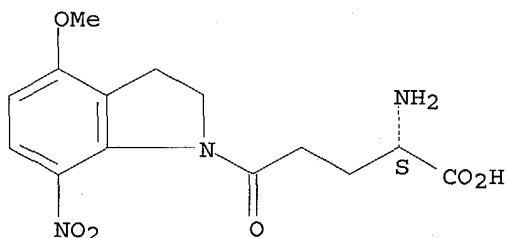
Absolute stereochemistry.



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



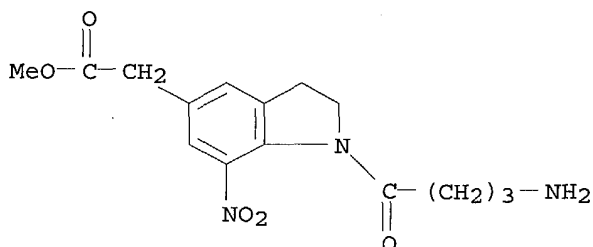
IT 295325-58-5P 402470-76-2P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

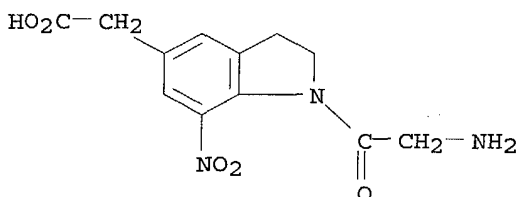
RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 402470-76-2 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:666708 CAPLUS

DOCUMENT NUMBER: 133:252301

TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties.

INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: Pct Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

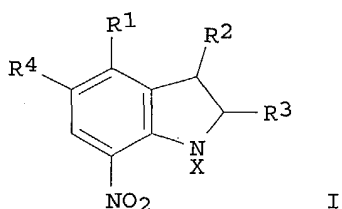
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000055133 | A1 | 20000921 | WO 2000-GB1039 | 20000320 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1161418 | A1 | 20011212 | EP 2000-911095 | 20000320 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

IE, FI
 JP 2002539196 T2 20021119 JP 2000-605564 20000320
 PRIORITY APPLN. INFO.: GB 1999-6192 A 19990318
 WO 2000-GB1039 W 20000320
 OTHER SOURCE(S): MARPAT 133:252301
 GI



AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH2)nY; N(COZ)(CH2)mY, N[(CH2)mY1][(CH2)NY]; R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y1 = H, CO2H, salts thereof, OPO32-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradiation, typically by flash irradiation with UV light, were prepared. I can be used to deliver biologically active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (preparation given) was stirred with NaNO3 in CF3CO2H to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-acetate as the phosphate salt. This was photolyzed in ammonium phosphate solution using an Hg arc lamp; at 38% photolysis recovery of **GABA** was 88%.

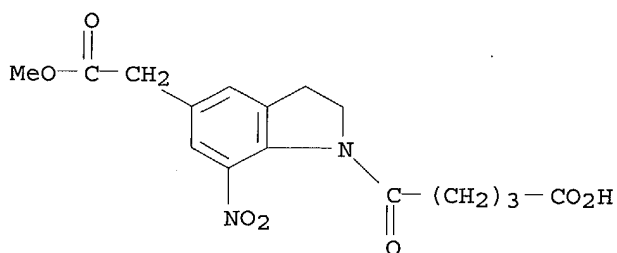
IT 239135-32-1P 239135-33-2P 239135-34-3P
 239135-39-8P 295325-58-5P 295325-59-6P
 295325-60-9P 295325-61-0P 295325-62-1P
 295325-63-2P 295325-64-3P 295325-65-4P
 295325-66-5P 295325-67-6P 295325-68-7P
 295325-69-8P 295325-72-3P 295325-74-5P
 295325-75-6P 295325-77-8P 295325-78-9P
 295325-98-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

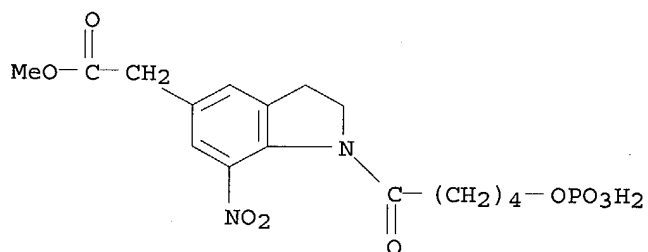
(preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties)

RN 239135-32-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

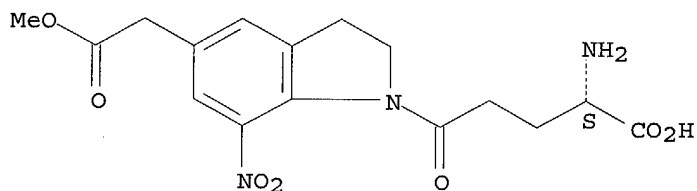


RN 239135-33-2 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)

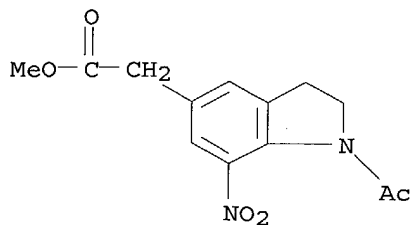


RN 239135-34-3 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

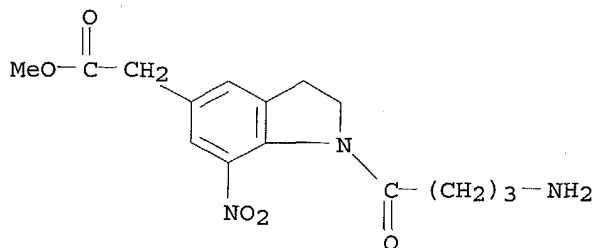


RN 239135-39-8 CAPLUS
CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



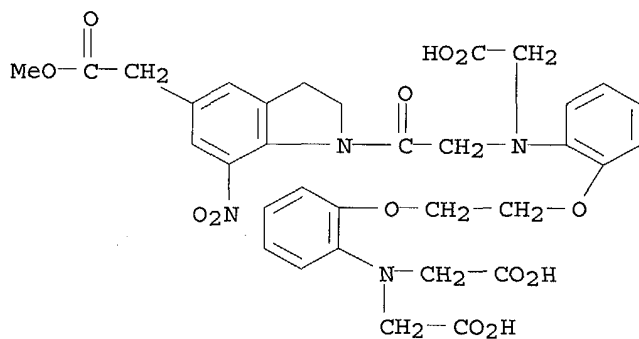
RN 295325-58-5 CAPLUS
CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI)

methyl ester (9CI) (CA INDEX NAME)



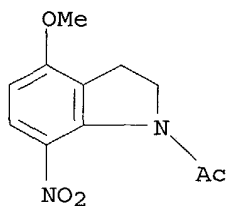
RN 295325-59-6 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



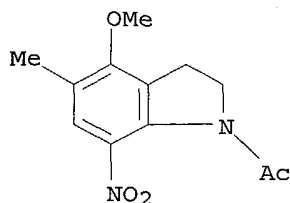
RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-61-0 CAPLUS

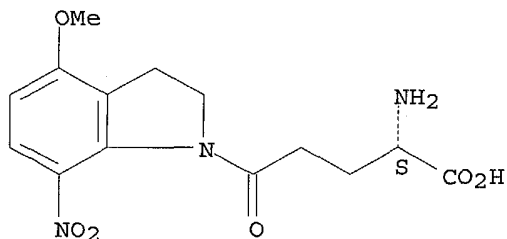
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPLUS

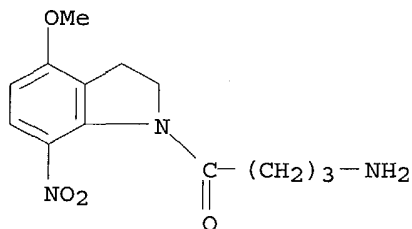
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



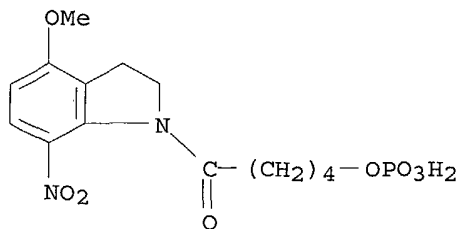
RN 295325-63-2 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-64-3 CAPLUS

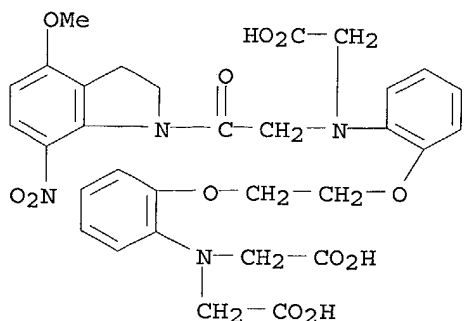
CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]- (9CI) (CA INDEX NAME)



RN 295325-65-4 CAPLUS

CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

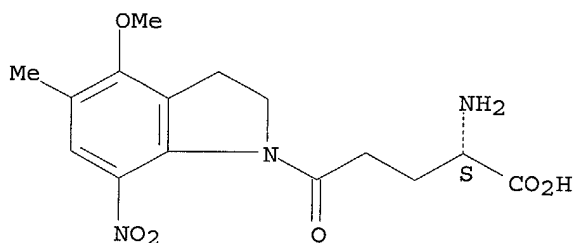
INDEX NAME)



RN 295325-66-5 CAPLUS

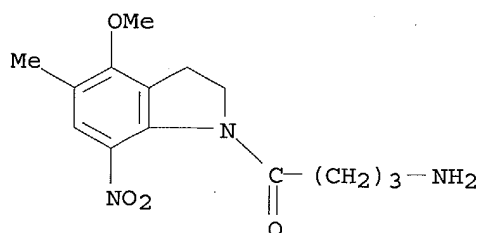
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



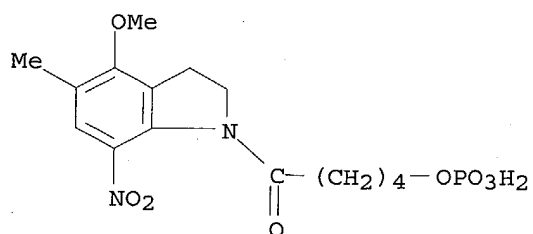
RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



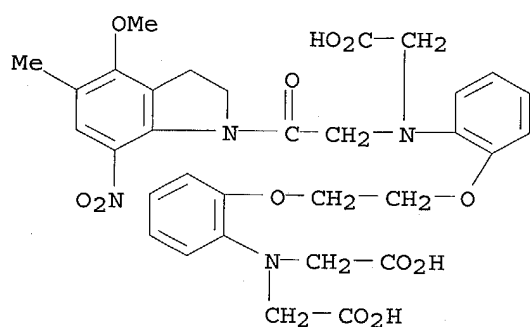
RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



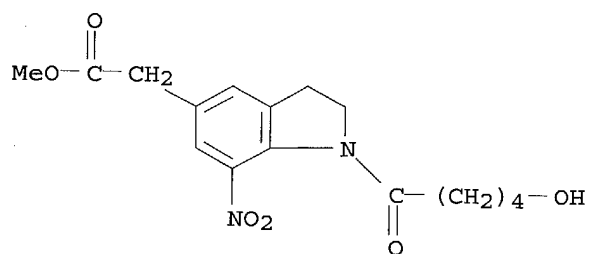
RN 295325-69-8 CAPLUS

CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI)
(CA INDEX NAME)



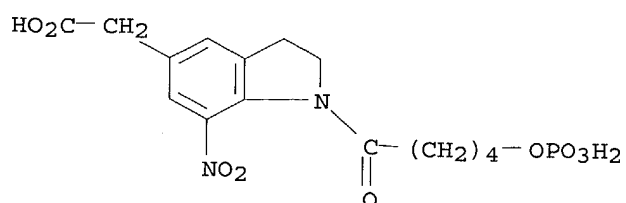
RN 295325-72-3 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

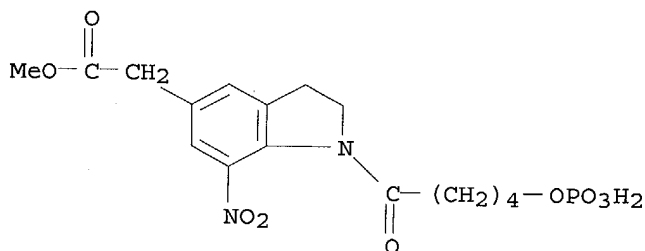


RN 295325-74-5 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]- (9CI) (CA INDEX NAME)



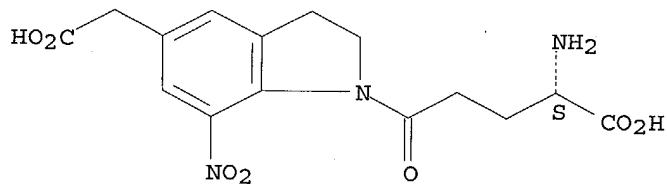
RN 295325-75-6 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

RN 295325-77-8 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

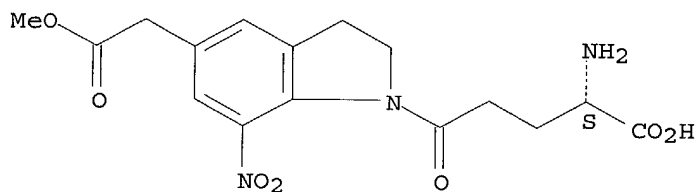
Absolute stereochemistry.



● 2 Na

RN 295325-78-9 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

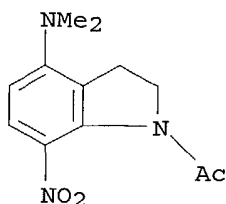
Absolute stereochemistry.



Na

RN 295325-98-3 CAPLUS

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)



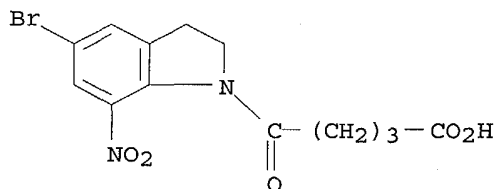
IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

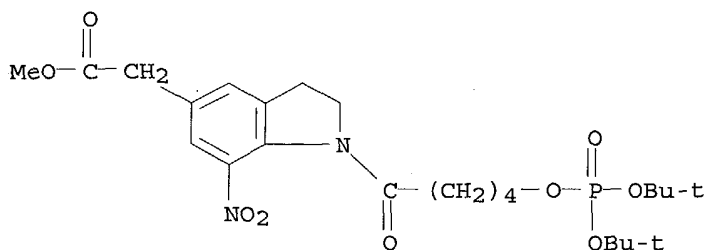
RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 295325-73-4 CAPLUS

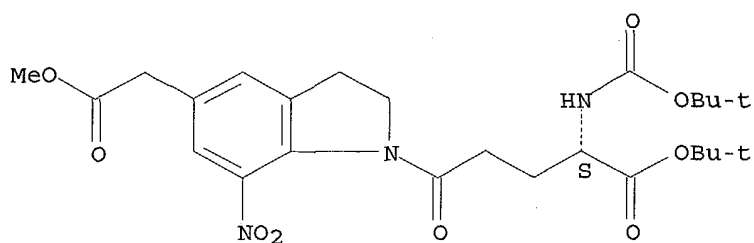
CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 17 ibib abs hitstr tot

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:814100 CAPLUS

DOCUMENT NUMBER: 137:325331

TITLE: Preparation of 7-nitroindoline derivatives for use as photochemical precursors capable of releasing bioactive effector moieties

INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

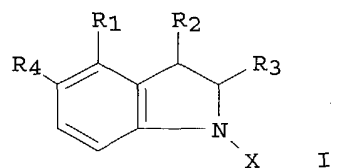
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2002083639 | A1 | 20021024 | WO 2002-GB971 | 20020308 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: GB 2001-9093 A 20010411

OTHER SOURCE(S): CASREACT 137:325331; MARPAT 137:325331

GI



AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and

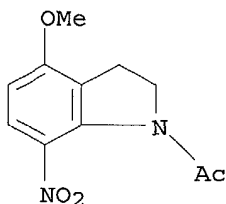
R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl4 to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxy-7-nitroindoline. The prep'd. compds. are useful to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 295325-60-9 CAPLUS

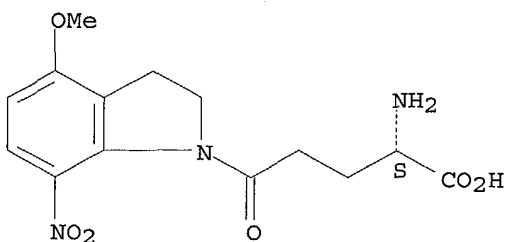
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



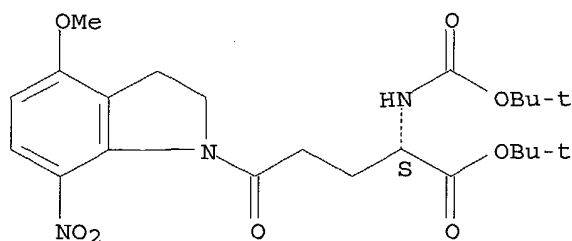
IT 444189-55-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and
acetic anhydride)

RN 444189-55-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-
2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester,
(.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:759359 CAPLUS

DOCUMENT NUMBER: 136:210906

TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl- and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters

AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.

CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK

SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42
CODEN: JNMEDT; ISSN: 0165-0270

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

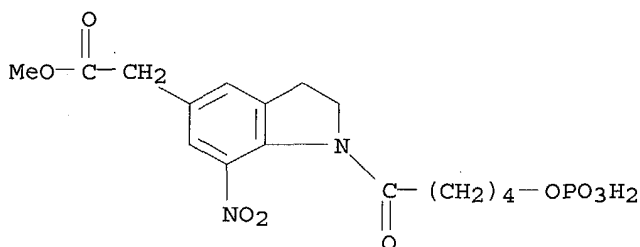
AB Reagents capable of rapid and efficient release of neuroactive amino acids (L-glutamate, GABA and glycine) upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindolinyl (NI)-caged and 4-methoxy-7-nitroindolinyl (MNI)-caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time. 1.0 to 0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

IT 239135-33-2 239135-34-3 295325-62-1

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl- and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

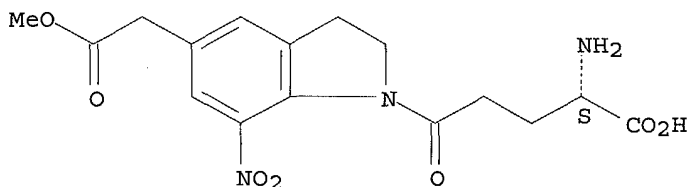
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

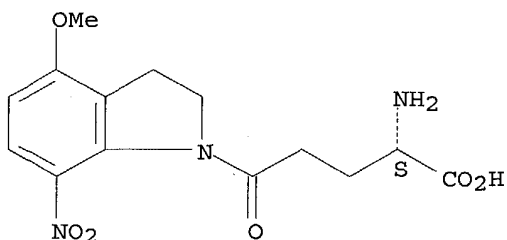
Absolute stereochemistry.



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

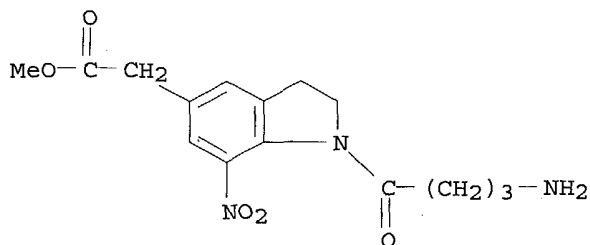


IT 295325-58-5P 402470-76-2P

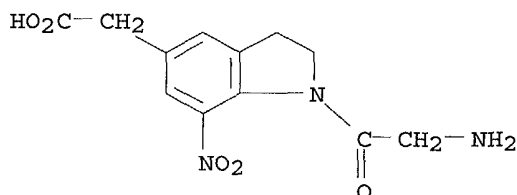
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(photochem. and pharmacol. evaluation of synthetic 7-nitroindoliny- and 4-methoxy-7-nitroindoliny- amino acids as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 402470-76-2 CAPLUS
CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

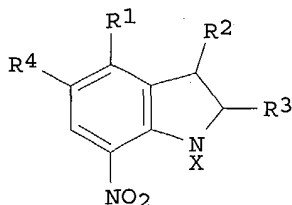


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:666708 CAPLUS
DOCUMENT NUMBER: 133:252301
TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties.
INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George
PATENT ASSIGNEE(S): Medical Research Council, UK
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000055133 | A1 | 20000921 | WO 2000-GB1039 | 20000320 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1161418 | A1 | 20011212 | EP 2000-911095 | 20000320 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002539196 | T2 | 20021119 | JP 2000-605564 | 20000320 |
| PRIORITY APPLN. INFO.: GB 1999-6192 A 19990318 | | | | |

WO 2000-GB1039 W 20000320

OTHER SOURCE(S): MARPAT 133:252301
GI

I

AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH2)nY; N(COZ)(CH2)mY, N[(CH2)mY1][(CH2)NY]; R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y1 = H, CO2H, salts thereof, OP032-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradiation, typically by flash irradiation with UV light, were prepared. I can be used to deliver biologically active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (preparation given) was stirred with NaNO3 in CF3CO2H to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-acetate as the phosphate salt. This was photolyzed in ammonium phosphate solution using an Hg arc lamp; at 38% photolysis recovery of GABA was 88%.

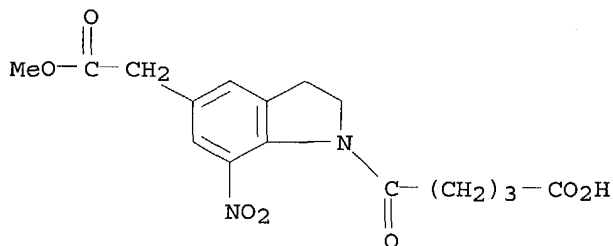
IT 239135-32-1P 239135-33-2P 239135-34-3P
239135-39-8P 295325-58-5P 295325-59-6P
295325-60-9P 295325-61-0P 295325-62-1P
295325-63-2P 295325-64-3P 295325-65-4P
295325-66-5P 295325-67-6P 295325-68-7P
295325-69-8P 295325-72-3P 295325-74-5P
295325-75-6P 295325-77-8P 295325-78-9P
295325-98-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties)

RN 239135-32-1 CAPLUS

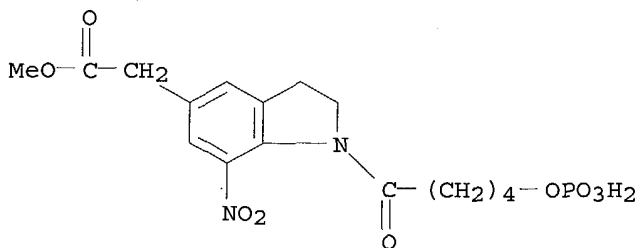
CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro- Δ -oxo- (9CI) (CA INDEX NAME)



RN 239135-33-2 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-

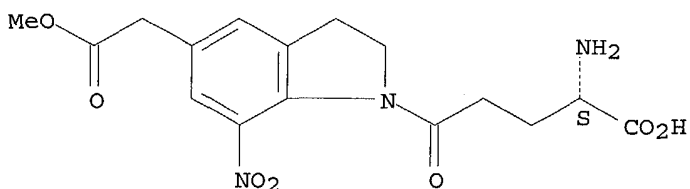
(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

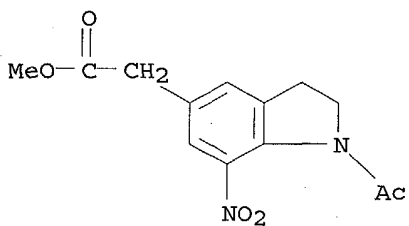
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.s.s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



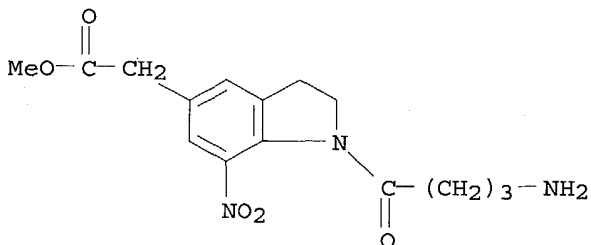
RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



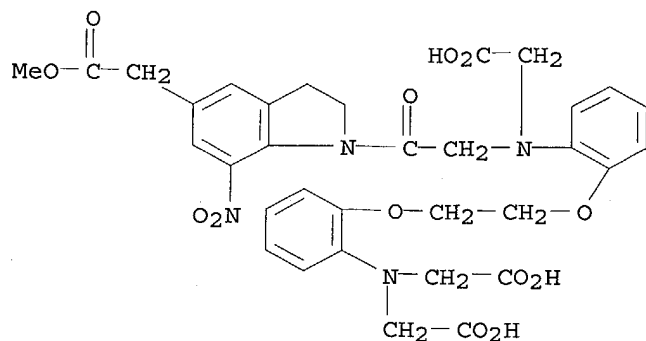
RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



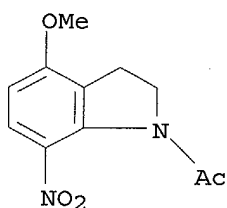
RN 295325-59-6 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



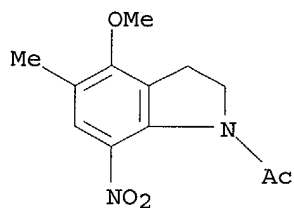
RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-61-0 CAPLUS

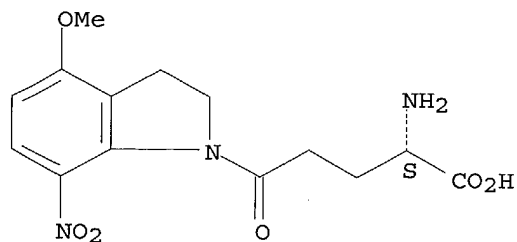
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPLUS

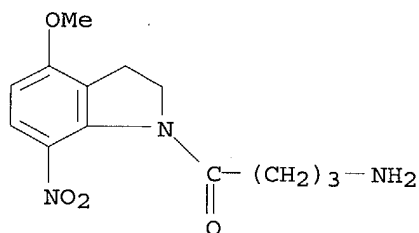
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



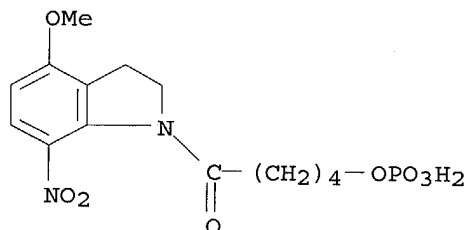
RN 295325-63-2 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI)
(CA INDEX NAME)



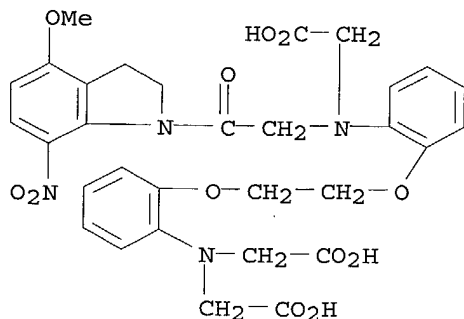
RN 295325-64-3 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



RN 295325-65-4 CAPLUS

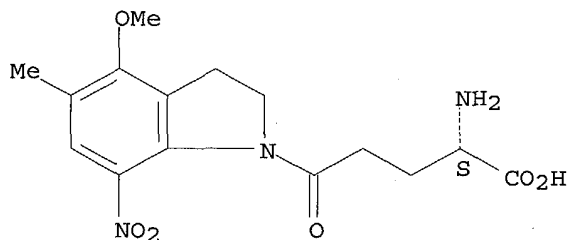
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



RN 295325-66-5 CAPLUS

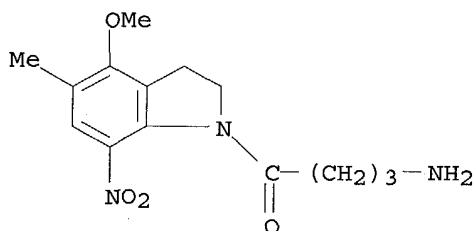
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



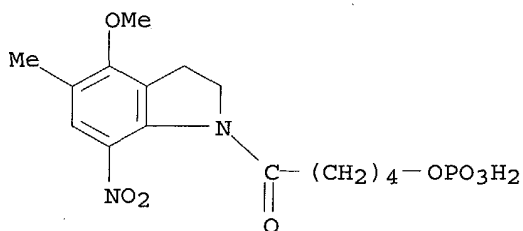
RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



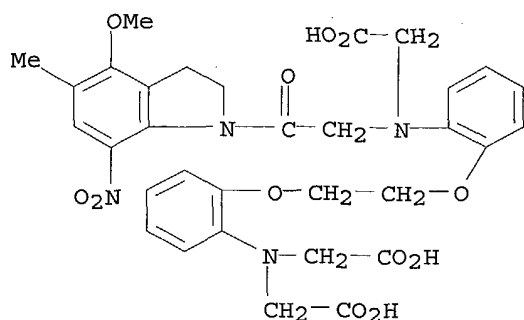
RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)

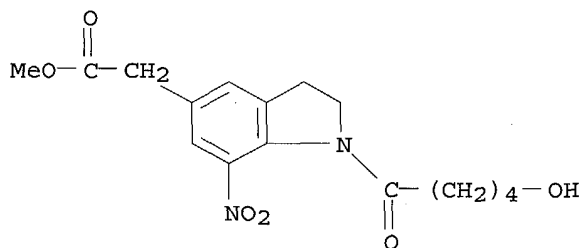


RN 295325-69-8 CAPLUS

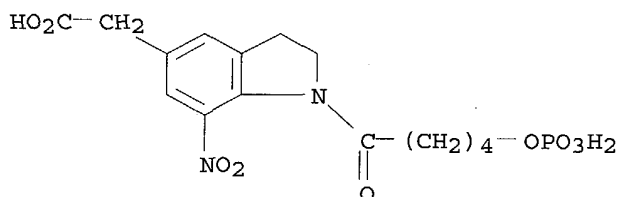
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



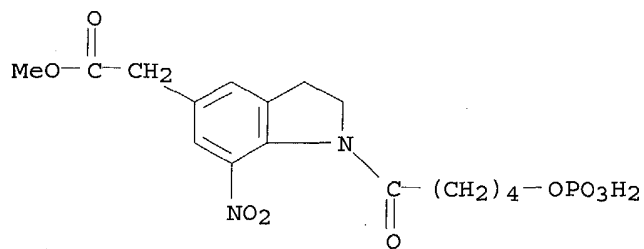
RN 295325-72-3 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-74-5 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



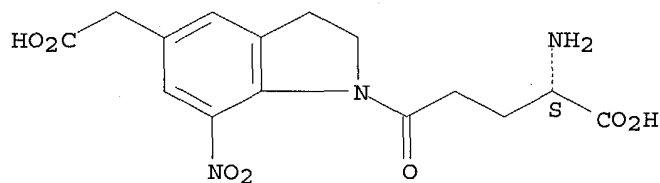
RN 295325-75-6 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

RN 295325-77-8 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

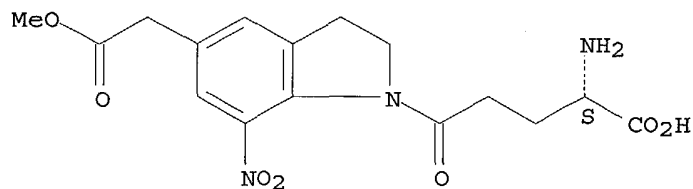
Absolute stereochemistry.



● 2 Na

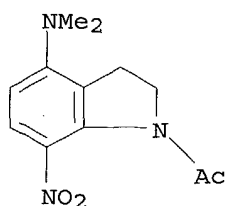
RN 295325-78-9 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na

RN 295325-98-3 CAPLUS
CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)



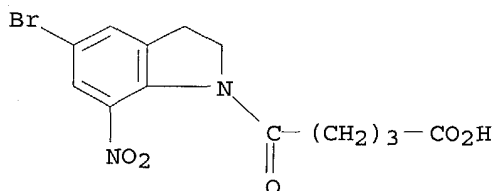
IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

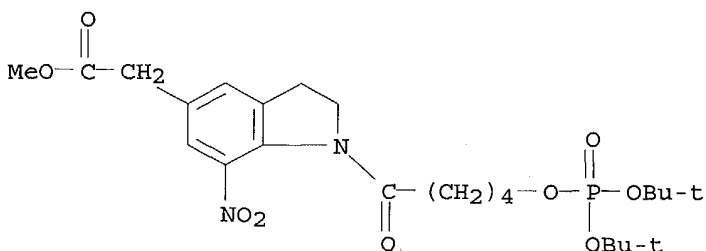
RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 295325-73-4 CAPLUS

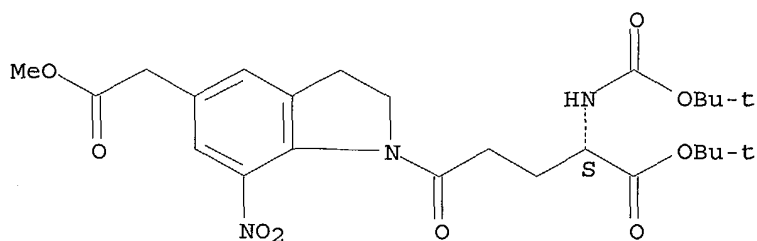
CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:633851 CAPLUS

DOCUMENT NUMBER: 117:233851

TITLE: Preparation of hydrazonoindolones as excitatory amino acid antagonists

INVENTOR(S): Dahl, Bjarne Hugo; Waetjen, Frank

PATENT ASSIGNEE(S): Neurosearch A/S, Den.

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

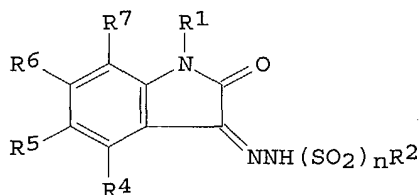
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 503349 | A1 | 19920916 | EP 1992-103104 | 19920224 |
| EP 503349 | B1 | 19950104 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE | | | | |
| US 5164404 | A | 19921117 | US 1991-670061 | 19910315 |
| ZA 9201328 | A | 19921125 | ZA 1992-1328 | 19920224 |
| ES 2069330 | T3 | 19950501 | ES 1992-103104 | 19920224 |
| AU 9211225 | A1 | 19920917 | AU 1992-11225 | 19920226 |
| AU 643877 | B2 | 19931125 | | |
| CA 2062853 | AA | 19920916 | CA 1992-2062853 | 19920312 |
| NO 9201000 | A | 19920916 | NO 1992-1000 | 19920313 |
| NO 180191 | B | 19961125 | | |
| NO 180191 | C | 19970305 | | |
| JP 05078350 | A2 | 19930330 | JP 1992-55531 | 19920313 |
| JP 3407896 | B2 | 20030519 | | |

PRIORITY APPLN. INFO.: US 1991-670061 A 19910315

OTHER SOURCE(S): MARPAT 117:233851

GI



I

AB Title compds. I [n = 0, 1; R1 = H, C1-6 alkyl, C3-7 cycloalkyl, CH2Ph, (substituted) Ph, acyl, OH, C1-6 alkoxy, CH2CO2H, CH2CN, etc.; R2 =

(substituted) Ph, -pyridyl; R4 - R7 = H, C1-36 alkyl, Ph, halo, C1-6 alkoxy, NO2, cyano, CF3, SO2NR11R12; R11, R12 = H, CH2Ph, C1-6 alkyl; or R6R7 or R4R5 = atoms to complete a 4-8 membered (substituted) carbocyclic ring] were prepd. for the treatment of disorders responsive to the blockade of glutamic or aspartic receptors. Thus, 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione (prepn. given) and 2-nitrophenylhydrazone were stirred in MeOH contg. HCl to give 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione-3-(2-nitrophenylhydrazone) as a mixt. of E- and Z-isomers. I are said to exhibit binding at 3H-kainate, NMDA, 3H-AMPA and/or 3H-glycine binding sites with IC50's of 1-100 .mu.M.

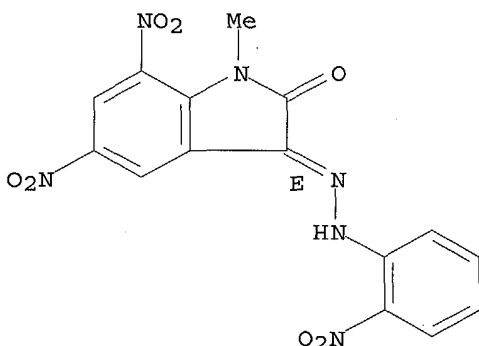
IT 144405-80-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antagonist for excitatory amino acids)

RN 144405-80-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[(2-nitrophenyl)hydrazone],
(E) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.



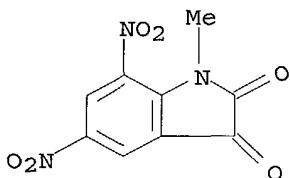
IT 136622-60-1P 136622-61-2P 136622-65-6P

136622-68-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for excitatory amino acid antagonists)

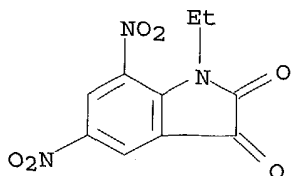
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

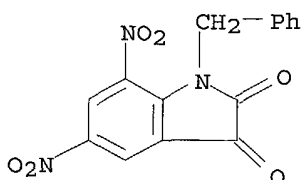


RN 136622-61-2 CAPLUS

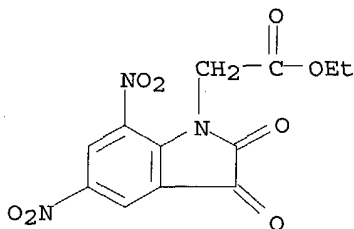
CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)



RN 136622-65-6 CAPLUS
CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 136622-68-9 CAPLUS
CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



=> d l6 ibib abs hitstr tot

L6 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:301852 CAPLUS

DOCUMENT NUMBER: 139:85609

TITLE: Phototransamidation as a method for the synthesis of N-glycosyl asparagines

AUTHOR(S): Vizvardi, Kristof; Kreutz, Christian; Davis, Alexander S.; Lee, Vincent P.; Philmus, Benjamin J.; Simo, Ondrej; Michael, Katja

CORPORATE SOURCE: Department of Chemistry, University of Hawaii, Honolulu, 96822, USA

SOURCE: Chemistry Letters (2003), 32(4), 348-349

CODEN: CMLTAG; ISSN: 0366-7022

PUBLISHER: Chemical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB N-Glycosyl asparagines were synthesized by a mild photochem. coupling method in which a photoreactive amide of an aspartic acid's .beta.-carboxyl group is condensed with an aminosaccharide. Upon excitation, the .gamma.-carbon becomes susceptible to nucleophilic attack and the obtained N-glycosyl asparagines, which may be useful building

blocks for the synthesis of N-glycopeptides and neoglycopeptides, are generated in good yields.

IT 553681-57-5P 553681-58-6P

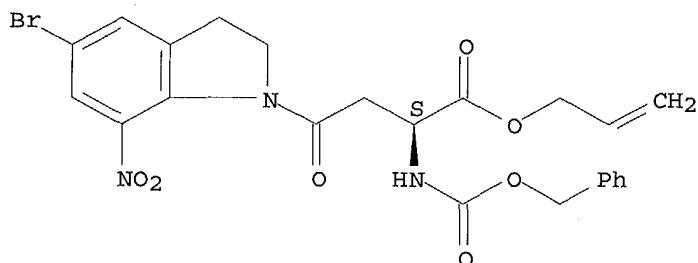
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of N-glycosyl asparagines by using a mild photochem. transamidation step)

RN 553681-57-5 CAPLUS

CN 1H-Indole-1-butanoic acid, 5-bromo-2,3-dihydro-7-nitro-.gamma.-oxo-.alpha.-[[(phenylmethoxy) carbonyl] amino]-, 2-propenyl ester, (.alpha.S)- (9CI)
(CA INDEX NAME)

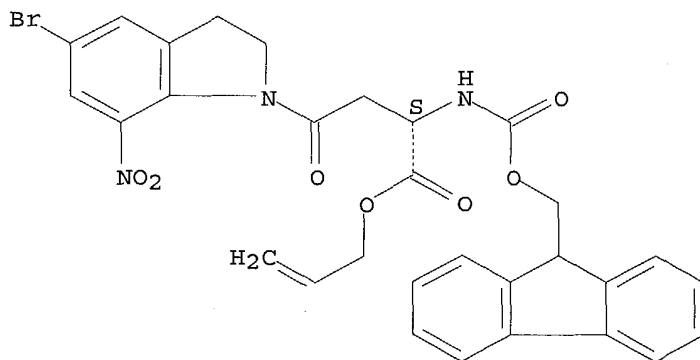
Absolute stereochemistry.



RN 553681-58-6 CAPLUS

CN 1H-Indole-1-butanoic acid, 5-bromo-.alpha.-[[(9H-fluoren-9-ylmethoxy) carbonyl] amino]-2,3-dihydro-7-nitro-.gamma.-oxo-, 2-propenyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:814100 CAPLUS

DOCUMENT NUMBER: 137:325331

TITLE: Preparation of 7-nitroindoline derivatives for use as photochemical precursors capable of releasing bioactive effector moieties

INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

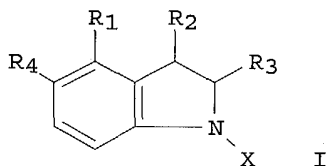
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|--|------------|
| WO 2002083639 | A1 | 20021024 | WO 2002-GB971 | 20020308 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | GB 2001-9093 | A 20010411 |
| OTHER SOURCE(S): | | | CASREACT 137:325331; MARPAT 137:325331 | |
| GI | | | | |



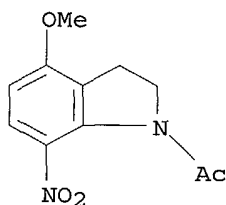
AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl₄ to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

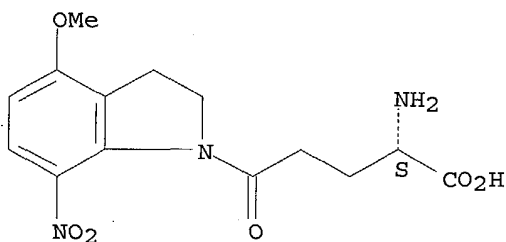
RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



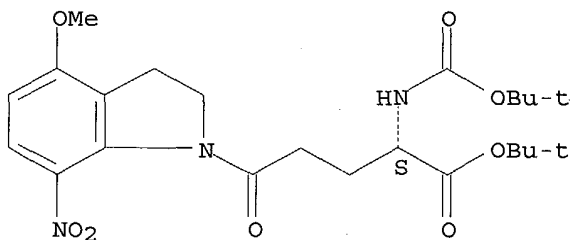
RN 295325-62-1 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 444189-55-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and acetic anhydride)
RN 444189-55-3 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:759359 CAPLUS
DOCUMENT NUMBER: 136:210906
TITLE: Photochemical and pharmacological evaluation of 7-nitroindoliny- and 4-methoxy-7-nitroindoliny- amino acids as novel, fast caged neurotransmitters
AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.

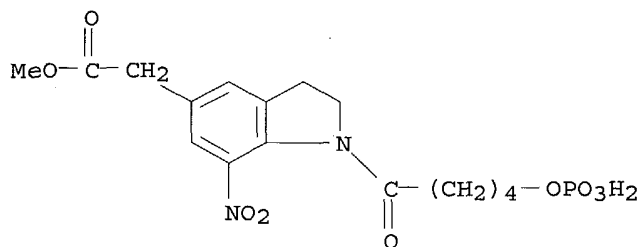
CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK
 SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42
 CODEN: JNMEDT; ISSN: 0165-0270
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Reagents capable of rapid and efficient release of neuroactive **amino acids** (L-glutamate, GABA and glycine) upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindoliny (NI)-caged and 4-methoxy-7-nitroindoliny (MNI)-caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time.1toreq.0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

IT 239135-33-2 239135-34-3 295325-62-1
 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindoliny-and 4-methoxy-7-nitroindoliny-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

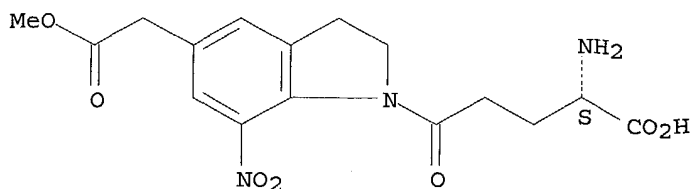
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

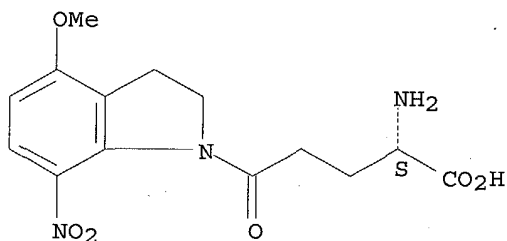
Absolute stereochemistry.



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

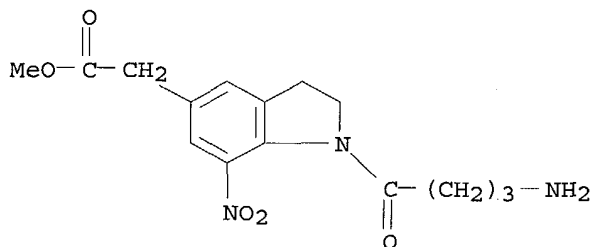


IT 295325-58-5P 402470-76-2P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(photochem. and pharmacol. evaluation of synthetic 7-nitroindoliny- and 4-methoxy-7-nitroindoliny-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

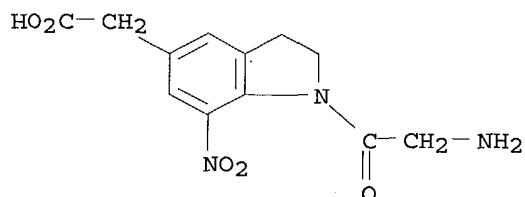
RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 402470-76-2 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:698992 CAPLUS

DOCUMENT NUMBER: 134:71451

TITLE: Effects of Aromatic Substituents on the Photocleavage of 1-Acyl-7-nitroindolines

AUTHOR(S): Papageorgiou, G.; Corrie, J. E. T.

CORPORATE SOURCE: National Institute for Medical Research, The Ridgeway, Mill Hill, London, NW7 1AA, UK

SOURCE: Tetrahedron (2000), 56(41), 8197-8205

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:71451

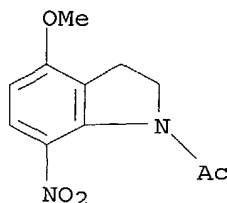
AB Photolysis of 1-acyl-7-nitroindolines in aq. soln. gives a carboxylic acid and a 7-nitrosoindole. These compds. are useful as photolabile precursors of carboxylic acids, particularly neuro-active **amino acids**. 4-Methoxy substitution improved the photolysis efficiency degree 2-fold but a 4-dimethylamino analog was essentially inert. A 5-alkyl substituent, that blocks unwanted nitration at this position, reduced the beneficial effect of the 4-methoxy group.

IT 295325-60-9P 295325-61-0P 295325-62-1P 314762-04-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (effect of arom. substituents on photocleavage of 1-acyl-7-nitroindolines)

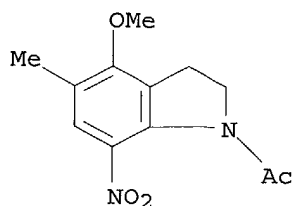
RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



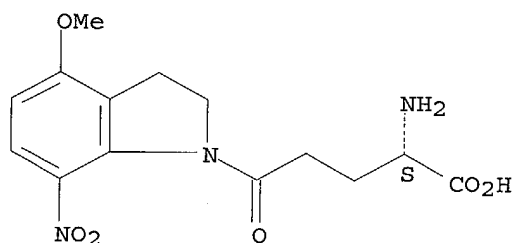
RN 295325-61-0 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

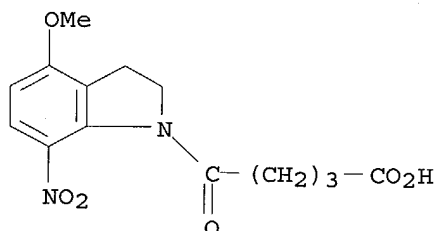


RN 295325-62-1 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

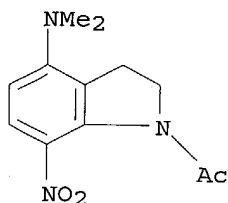


RN 314762-04-4 CAPLUS
CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



IT 295325-98-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(effect of arom. substituents on photocleavage of 1-acyl-7-nitroindolines)

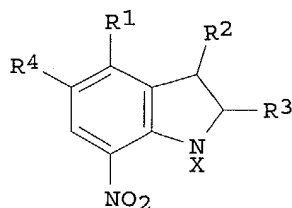
RN 295325-98-3 CAPLUS
CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2000:666708 CAPLUS
 DOCUMENT NUMBER: 133:252301
 TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties.
 INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George
 PATENT ASSIGNEE(S): Medical Research Council, UK
 SOURCE: PCT Int. Appl., 70 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2000055133 | A1 | 20000921 | WO 2000-GB1039 | 20000320 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1161418 | A1 | 20011212 | EP 2000-911095 | 20000320 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002539196 | T2 | 20021119 | JP 2000-605564 | 20000320 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | GB 1999-6192 | A 19990318 |
| | | | WO 2000-GB1039 | W 20000320 |
| OTHER SOURCE(S): MARPAT 133:252301 | | | | |
| GI | | | | |



AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH2)nY; N(COZ)(CH2)mY, N[(CH2)mY1][(CH2)NY]; R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y1 = H, CO2H, salts thereof, OPO32-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradiation, typically by flash irradiation with UV light, were prepared. I can be used to deliver biologically active effector moieties such as neuroactive amino acids or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO3 in CF3CO2H to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-

acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38% photolysis recovery of GABA was 88%.

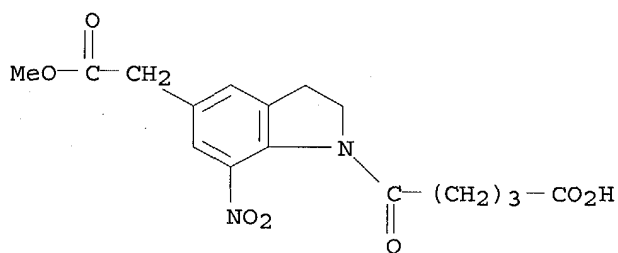
IT 239135-32-1P 239135-33-2P 239135-34-3P
239135-39-8P 295325-58-5P 295325-59-6P
295325-60-9P 295325-61-0P 295325-62-1P
295325-63-2P 295325-64-3P 295325-65-4P
295325-66-5P 295325-67-6P 295325-68-7P
295325-69-8P 295325-72-3P 295325-74-5P
295325-75-6P 295325-77-8P 295325-78-9P
295325-98-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

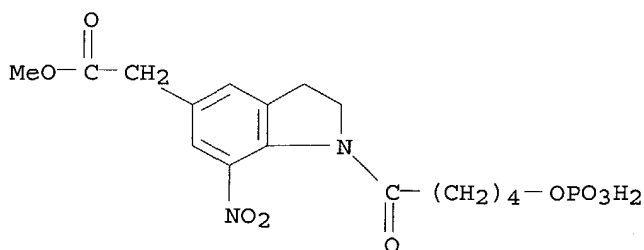
RN 239135-32-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 239135-33-2 CAPLUS

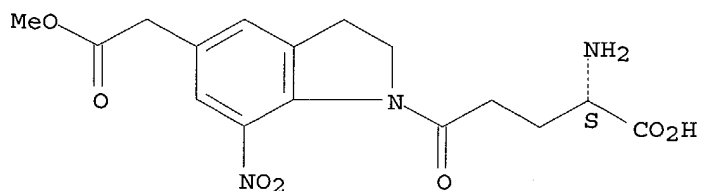
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



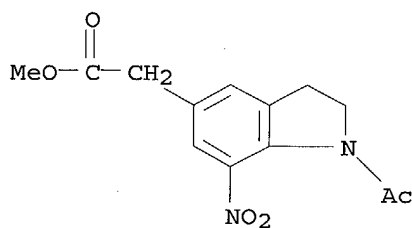
RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

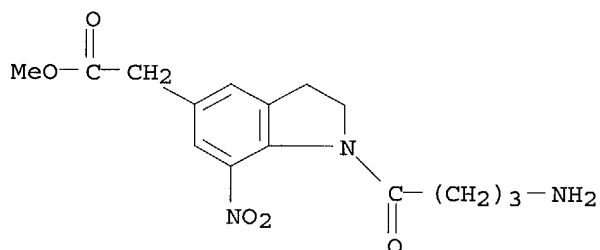
Absolute stereochemistry.



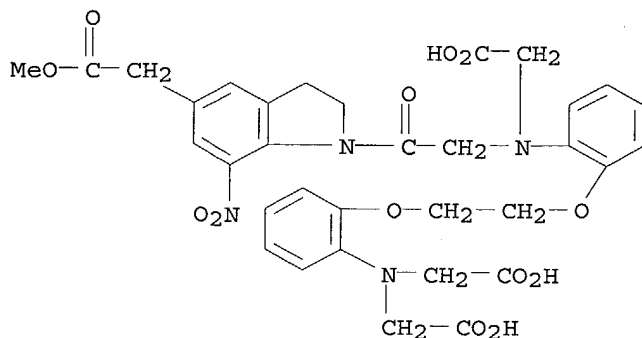
RN 239135-39-8 CAPLUS
CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI)
(CA INDEX NAME)



RN 295325-58-5 CAPLUS
CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-,
methyl ester (9CI) (CA INDEX NAME)

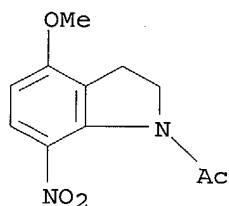


RN 295325-59-6 CAPLUS
CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-,
.alpha.-methyl ester (9CI) (CA INDEX NAME)



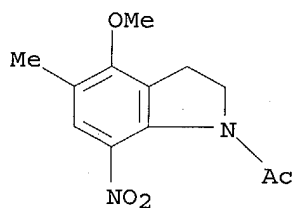
RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-61-0 CAPLUS

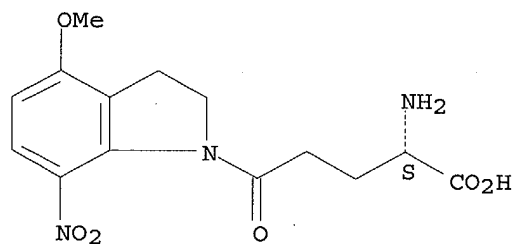
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPLUS

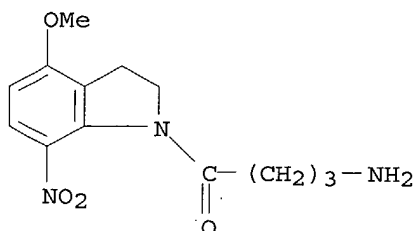
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



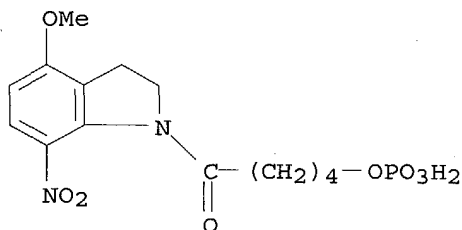
RN 295325-63-2 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



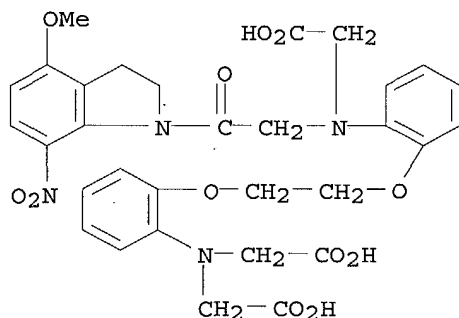
RN 295325-64-3 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-(9CI) (CA INDEX NAME)



RN 295325-65-4 CAPLUS

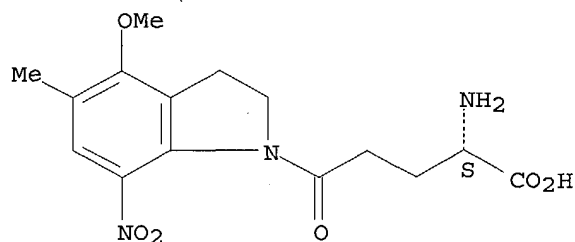
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]-(9CI) (CA INDEX NAME)



RN 295325-66-5 CAPLUS

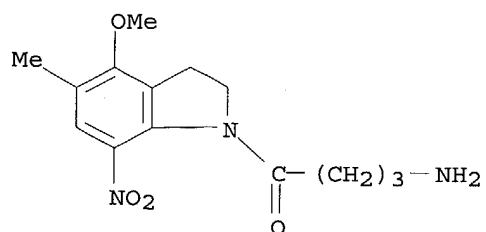
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



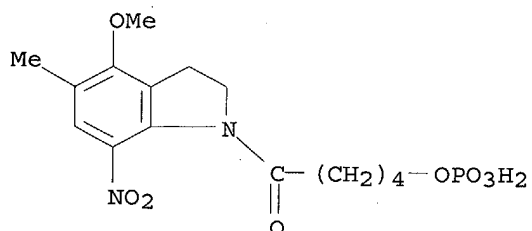
RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro-(9CI) (CA INDEX NAME)



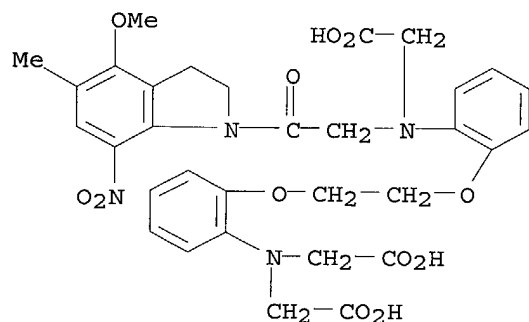
RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]- (9CI) (CA INDEX NAME)



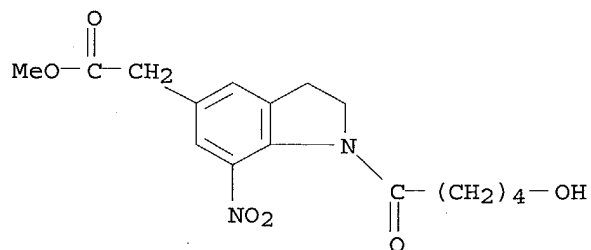
RN 295325-69-8 CAPLUS

CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



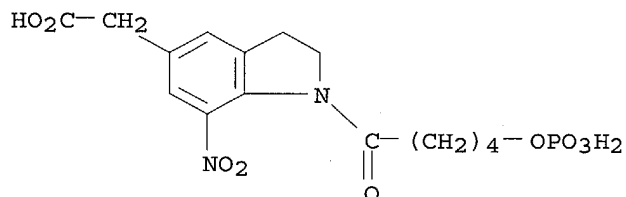
RN 295325-72-3 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



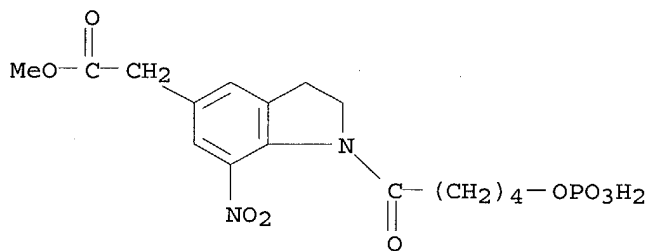
RN 295325-74-5 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



RN 295325-75-6 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)

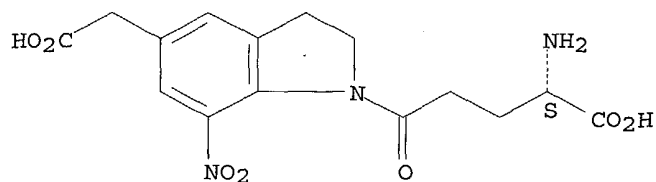


●2 Na

RN 295325-77-8 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

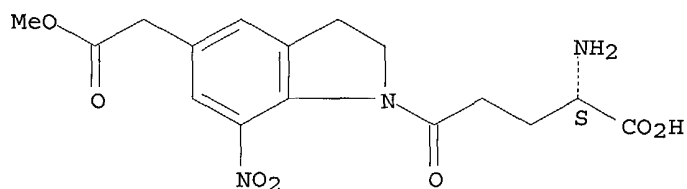
Absolute stereochemistry.



● 2 Na

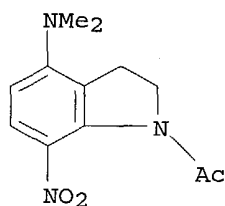
RN 295325-78-9 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

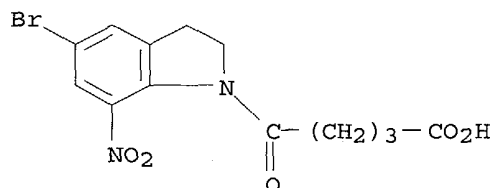


● Na

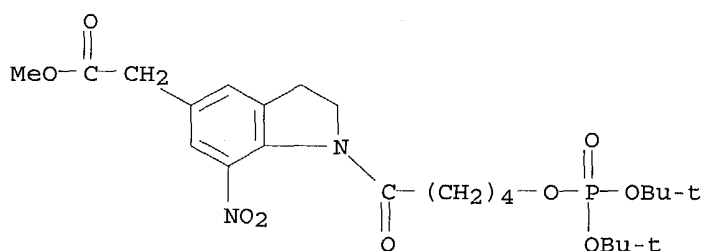
RN 295325-98-3 CAPLUS
CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)



IT 239135-35-4P 295325-73-4P 295325-76-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)
RN 239135-35-4 CAPLUS
CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

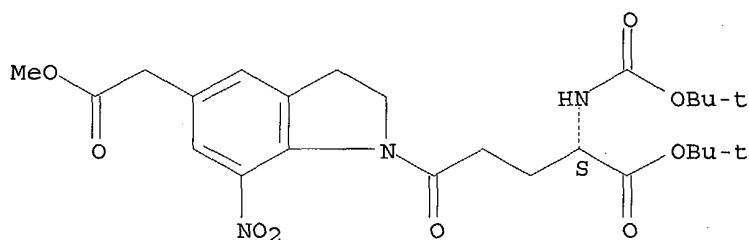


RN 295325-73-4 CAPLUS
CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-76-7 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:390833 CAPLUS
DOCUMENT NUMBER: 131:165619
TITLE: Photorelease of Carboxylic Acids from 1-Acyl-7-nitroindolines in Aqueous Solution: Rapid and Efficient Photorelease of L-Glutamate
AUTHOR(S): Papageorgiou, George; Ogden, David C.; Barth, Andreas; Corrie, John E. T.
CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK
SOURCE: Journal of the American Chemical Society (1999), 121(27), 6503-6504
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Photorelease of biol. active compds. from photocleavable (caged) precursors is a useful tool to study biol. processes but rapid, efficient release of neuroactive **amino acids** has been elusive.

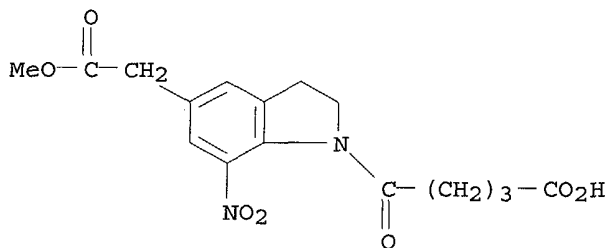
We now describe stable 1-acyl-7-nitro-indolines that rapidly and efficiently photorelease carboxylates, including L-glutamate, in neutral aq. soln. L-Glutamate precursors were tested in primary cultures of rat cerebellar granule neurons for their pharmacol. properties and ability to activate glutamate ion channels upon photolysis.

IT 239135-32-1P 239135-34-3P

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-32-1 CAPLUS

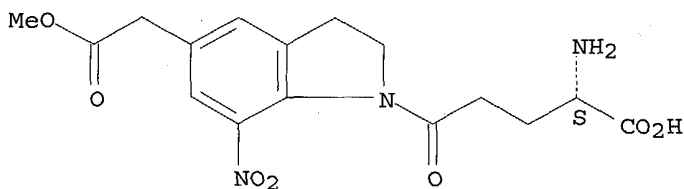
CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



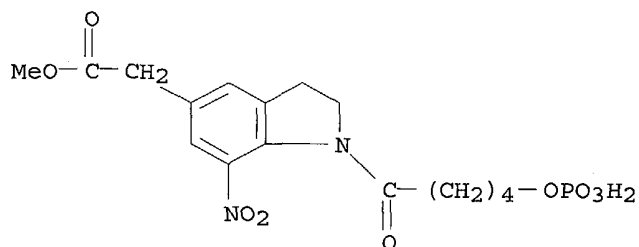
IT 239135-33-2P 239135-35-4P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

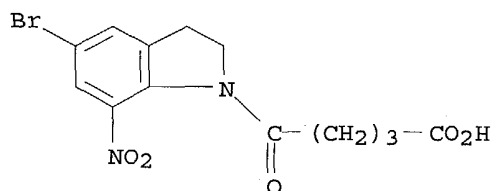
RN 239135-33-2 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI)
(CA INDEX NAME)



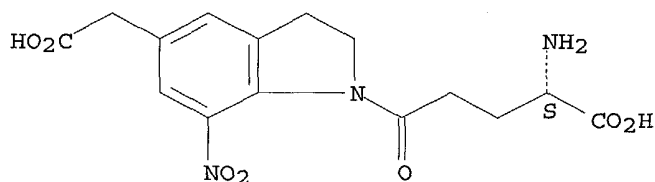
IT 239135-40-1P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-40-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

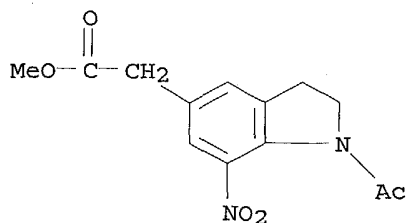


IT 239135-39-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI)
(CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:884192 CAPLUS

DOCUMENT NUMBER: 123:285774

TITLE: Preparation of isatin-derivative excitatory amino acid receptor antagonists

INVENTOR(S): Watjen, Frank

PATENT ASSIGNEE(S): Neurosearch A/S, Den.

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

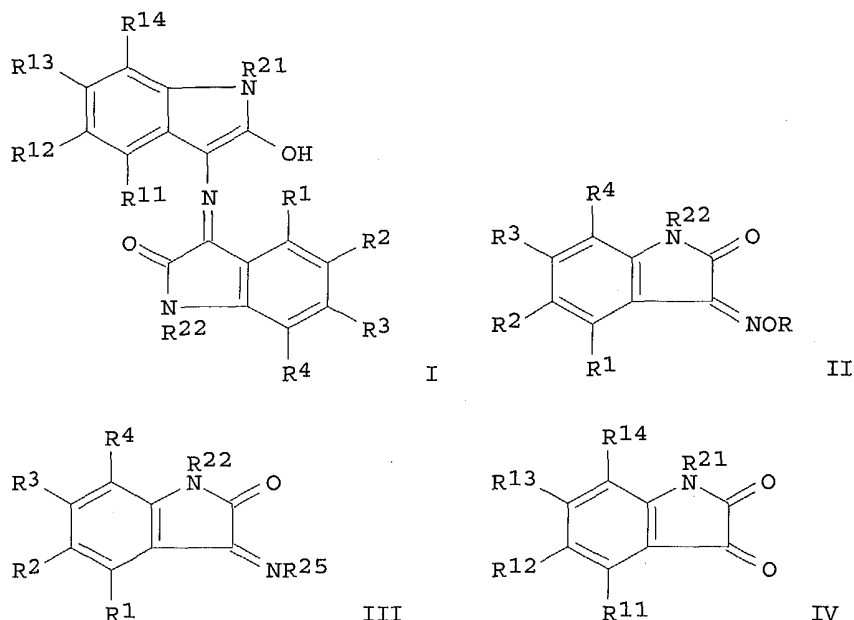
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|--|-----------------|----------|
| EP 667340 | A1 | 19950816 | EP 1995-610002 | 19950117 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| US 5565580 | A | 19961015 | US 1995-372598 | 19950113 |
| JP 08034771 | A2 | 19960206 | JP 1995-10136 | 19950125 |
| PRIORITY APPLN. INFO.: | | | DK 1994-114 | 19940127 |
| OTHER SOURCE(S): | | CASREACT 123:285774; MARPAT 123:285774 | | |
| GI | | | | |

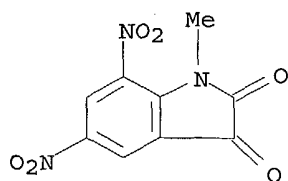


AB The title compds. (I; R1-R4, R11-R14 = H, halogen, CF₃, CN, NO₂; .gtoreq.1 of which must .noteq. H; for R21 and R22 one is H and the other is alkyl or both are H), useful as excitatory **amino acid** (e.g., NMDA, AMPA) receptor antagonists for the treatment of cerebrovascular diseases (no data), Alzheimer's disease (no data), schizophrenia (no data), Parkinsonism (no data), etc. (no data), are prepd. by heating isatin derivs. (II; R = alkyl, PhCH₂; or III; R25 = alkyl, aralkyl) with dihydroindolediones (IV). Thus, 5,7-dinitroindole-2,3-dione and PhCH₂NH₂ were heated together in AcOH and EtOH, producing I (R1 = R3 = R11 = R13 = R21 = R22 = H, R2 = R4 = R12 = R14 = NO₂) (V), m.p. >300.degree.. V demonstrated a ED₅₀ of 0.1 mg/kg (i.v.) for breaking 2-amino-3-(3-hydroxy-5-tert-butyl-4-isoxazolyl)propionic acid-induced rigidity in mice.

IT 136622-60-1, 5,7-Dinitro-1-methylindole-2,3-dione
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of isatin-deriv. excitatory **amino acid**
 receptor antagonists)

RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:761965 CAPLUS

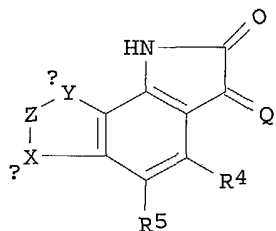
DOCUMENT NUMBER: 123:340088

TITLE: Isatin oxime derivatives, their preparation and use as antagonists of excitatory **amino**

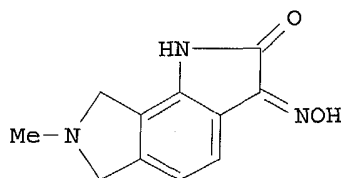
INVENTOR(S): **acids at the AMPA receptor**
 Waetjen, Frank; Dahl, Bjarne H.; Drejer, Jorgen;
 Jensen, Lein H.
 PATENT ASSIGNEE(S): NeuroSearch A/S, Den.
 SOURCE: U.S., 8 pp. Cont.-in-part of U.S. 5,242,918.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5436250 | A | 19950725 | US 1993-88328 | 19930707 |
| ZA 9206491 | A | 19930308 | ZA 1992-6491 | 19920827 |
| AU 9224820 | A1 | 19930405 | AU 1992-24820 | 19920827 |
| AU 655672 | B2 | 19950105 | | |
| US 5242918 | A | 19930907 | US 1992-936579 | 19920827 |
| PL 170920 | B1 | 19970228 | PL 1992-302584 | 19920827 |
| CZ 282759 | B6 | 19970917 | CZ 1994-395 | 19920827 |
| SK 280578 | B6 | 20000410 | SK 1994-238 | 19920827 |
| NO 9400676 | A | 19940427 | NO 1994-676 | 19940225 |
| PRIORITY APPLN. INFO.: | | | US 1991-751165 | B2 19910828 |
| | | | US 1992-831851 | B2 19920205 |
| | | | US 1992-936579 | A2 19920827 |
| | | | WO 1992-EP1999 | A 19920827 |

OTHER SOURCE(S): MARPAT 123:340088
 GI



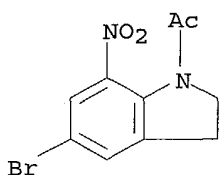
I



II

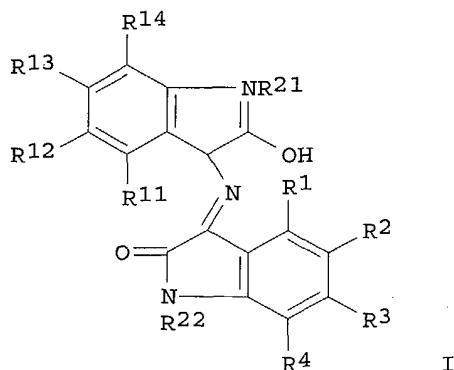
AB Isatin oxime derivs. I are claimed wherein R4 and R5 independently are hydrogen, halogen, CF3, CN, NO2 or SO2NR1R2 wherein R1 is hydrogen or C1-6-alkyl which may be straight, branched or cyclic, R2 is hydrogen or C1-6-alkyl which may be straight, branched or cyclic, or wherein R1 and R2 together represent (CH2)nA(CH2)m, wherein A is O, S, CH2 or NRI, wherein RI is H, C1-6-alkyl which may be straight, branched or cyclic, n is 0, 1, 2, 3, 4, 5 and m is 0, 1, 2, 3, 4, 5; Q is NOH, O; Z = O, S, NR11, .alpha.-C(:O)NR1111-.beta., NR1VC(:O)NRV, .alpha.-OC(:O)-.beta., wherein R11, R111, R1V and RV independently are hydrogen, benzyl, (C:O)CF3, C1-6-acyl, C1-6-alkoxy which may be branched or cyclic, or C1-6-alkyl which may be straight, branched or cyclic, CH2CO2RVI wherein RVI is hydrogen or C1-6-alkyl which may be straight or branched; X is (CH2)o wherein o is 0, 1, 2, or 3; Y is (CH2)p wherein p is 0, 1, 2 or 3; .alpha. and .beta. indicate attachment points. I exhibit valuable biol. properties because of their strong excitatory **amino acid** (EAA) antagonizing properties at the AMPA [(RS)-.alpha.-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid] binding site. Thus, e.g., oximation of 7-methyl-1,6,7,8-tetrahydrobenzo[2,1-b:3,4-c']dipyrrole-2,3-dione (prepn. given) with hydroxylamine hydrochloride afforded 7-methyl-1,6,7,8-tetrahydrobenzo[2,1-b:3,4-c']dipyrrole-2,3-dione-3-oxime (II) which exhibited an IC50 of 1.mu.M in the AMPA binding assay.

IT **62368-07-4**, 1-Acetyl-5-bromo-7-nitroindoline
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (isatin oxime derivs., their prepn. and use as antagonists of
 excitatory **amino acids** at the AMPA receptor)
 RN 62368-07-4 CAPLUS
 CN 1H-Indole, 1-acetyl-5-bromo-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1995:416352 CAPLUS
 DOCUMENT NUMBER: 122:187389
 TITLE: Preparation of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory **amino acid** antagonists
 INVENTOR(S): Waetjen, Frank; Drejer, Jorgen; Jensen, Leif Helth
 PATENT ASSIGNEE(S): Neurosearch A/S, Den.
 SOURCE: Eur. Pat. Appl., 9 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|-------------------|----------|-----------------|----------|
| EP 629615 | A1 | 19941221 | EP 1994-610030 | 19940601 |
| EP 629615 | B1 | 20000223 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| AT 189889 | E | 20000315 | AT 1994-610030 | 19940601 |
| US 5478859 | A | 19951226 | US 1994-259016 | 19940613 |
| PRIORITY APPLN. INFO.: | | | DK 1993-696 | 19930614 |
| OTHER SOURCE(S): | MARPAT 122:187389 | | | |
| GI | | | | |



AB Title compds. (I; R1-R4, R11-R14 = H, halo, CF3, cyano, NO2; R21, R22 =

alkyl) were prepd. Thus, 5,7-dinitro-1-methylindole-2,3-dione was refluxed with PhCH₂NH₂ in EtOH contg. HOAc to give I (R₂ = R₄ = R₁₂ = R₁₄ = NO₂, R₂₁ = R₂₂ = Me) which had ED₅₀ of 0.1mg/kg i.v. against .alpha.-amino-3-hydroxy-5-tert-butyl-4-isoxazolepropionic acid-induced rigidity in mice.

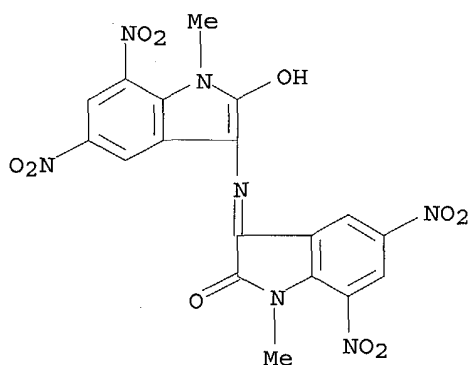
IT **161557-74-0P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory amino acid antagonists)

RN 161557-74-0 CAPLUS

CN 2H-Indol-2-one, 1,3-dihydro-3-[(2-hydroxy-1-methyl-5,7-dinitro-1H-indol-3-yl)imino]-1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



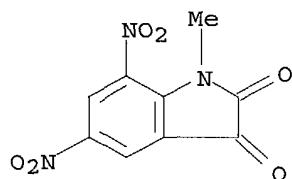
IT **136622-60-1 136623-08-0**

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory amino acid antagonists)

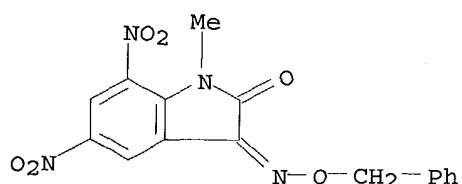
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



RN 136623-08-0 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)

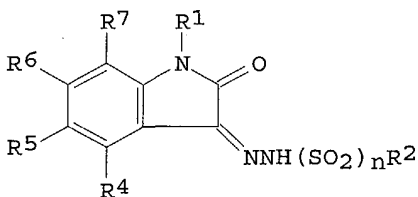


L6 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:633851 CAPLUS
DOCUMENT NUMBER: 117:233851
TITLE: Preparation of hydrazonoindolones as excitatory
amino acid antagonists
INVENTOR(S): Dahl, Bjarne Hugo; Waetjen, Frank
PATENT ASSIGNEE(S): Neurosearch A/S, Den.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 503349 | A1 | 19920916 | EP 1992-103104 | 19920224 |
| EP 503349 | B1 | 19950104 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE | | | | |
| US 5164404 | A | 19921117 | US 1991-670061 | 19910315 |
| ZA 9201328 | A | 19921125 | ZA 1992-1328 | 19920224 |
| ES 2069330 | T3 | 19950501 | ES 1992-103104 | 19920224 |
| AU 9211225 | A1 | 19920917 | AU 1992-11225 | 19920226 |
| AU 643877 | B2 | 19931125 | | |
| CA 2062853 | AA | 19920916 | CA 1992-2062853 | 19920312 |
| NO 9201000 | A | 19920916 | NO 1992-1000 | 19920313 |
| NO 180191 | B | 19961125 | | |
| NO 180191 | C | 19970305 | | |
| JP 05078350 | A2 | 19930330 | JP 1992-55531 | 19920313 |
| JP 3407896 | B2 | 20030519 | | |

PRIORITY APPLN. INFO.: US 1991-670061 A 19910315
OTHER SOURCE(S): MARPAT 117:233851
GI



AB Title compds. I [n = 0, 1; R1 = H, C1-6 alkyl, C3-7 cycloalkyl, CH2Ph, (substituted) Ph, acyl, OH, C1-6 alkoxy, CH2CO2H, CH2CN, etc.; R2 = (substituted) Ph, -pyridyl; R4 - R7 = H, C1-36 alkyl, Ph, halo, C1-6 alkoxy, NO2, cyano, CF3, SO2NR11R12; R11, R12 = H, CH2Ph, C1-6 alkyl; or R6R7 or R4R5 = atoms to complete a 4-8 membered (substituted) carbocyclic ring] were prepd. for the treatment of disorders responsive to the blockade of glutamic or aspartic receptors. Thus, 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione (prepn. given) and 2-nitrophenylhydrazone were stirred in MeOH contg. HCl to give 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione-3-(2-nitrophenylhydrazone) as a mixt. of E- and Z-isomers. I are said to exhibit binding at 3H-kainate, NMDA, 3H-AMPA and/or 3H-glycine binding sites with IC50's of 1-100 .mu.M.

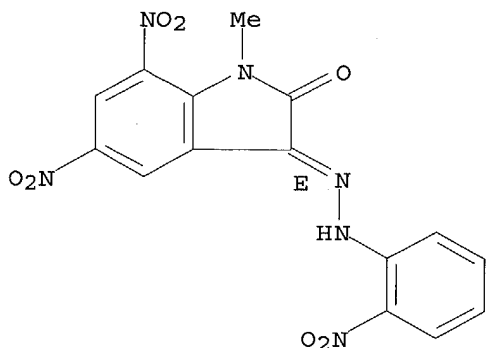
IT 144405-80-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antagonist for excitatory amino acids
)

RN 144405-80-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[(2-nitrophenyl)hydrazone],
(E) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.



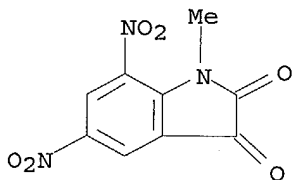
IT 136622-60-1P 136622-61-2P 136622-65-6P

136622-68-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for excitatory amino acid
antagonists)

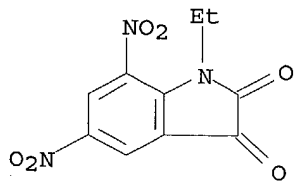
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



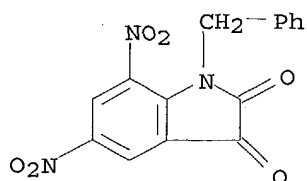
RN 136622-61-2 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)

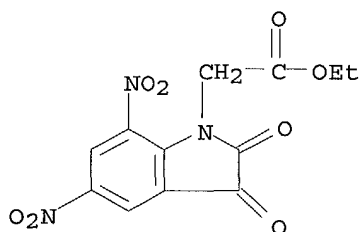


RN 136622-65-6 CAPLUS

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 136622-68-9 CAPLUS
CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester
(9CI) (CA INDEX NAME)

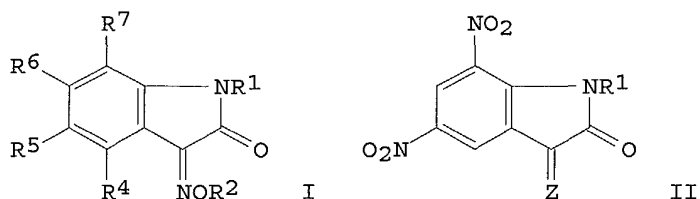


L6 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1991:583089 CAPLUS
DOCUMENT NUMBER: 115:183089
TITLE: Preparation of isatin derivatives as central nervous
system (CNS) agents
INVENTOR(S): Watjen, Frank; Drejer, Jorgen; Jensen, Leif Helth
PATENT ASSIGNEE(S): Neurosearch A/S, Den.
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 432648 | A2 | 19910619 | EP 1990-123474 | 19901206 |
| EP 432648 | A3 | 19910925 | | |
| EP 432648 | B1 | 19950802 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| ZA 9009479 | A | 19910925 | ZA 1990-9479 | 19901126 |
| JP 03204856 | A2 | 19910906 | JP 1990-330898 | 19901130 |
| JP 3057095 | B2 | 20000626 | | |
| FI 9005943 | A | 19910612 | FI 1990-5943 | 19901203 |
| ES 2077623 | T3 | 19951201 | ES 1990-123474 | 19901206 |
| CA 2031756 | AA | 19910612 | CA 1990-2031756 | 19901207 |
| CA 2031756 | C | 20020611 | | |
| NO 9005320 | A | 19910612 | NO 1990-5320 | 19901210 |
| NO 174464 | B | 19940131 | | |
| NO 174464 | C | 19940511 | | |
| AU 9067920 | A1 | 19910613 | AU 1990-67920 | 19901210 |
| AU 629075 | B2 | 19920924 | | |
| US 5198461 | A | 19930330 | US 1991-710790 | 19910605 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | DK 1989-6248 | A 19891211 |
| | | | DK 1989-6470 | A 19891219 |
| | | | DK 1990-85 | A 19900112 |

DK 1990-86 A 19900112
 DK 1990-363 A 19900212
 DK 1990-2093 A 19900831
 US 1990-624409 B2 19901207

OTHER SOURCE(S): MARPAT 115:183089
 GI



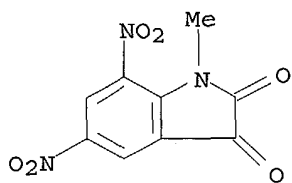
AB Isatin derivs. [I; R1 = H, linear or branched C1-6 alkyl, C3-7 cycloalkyl, (substituted) Ph, PhCH2, OH, acyl, etc.; R2 = H, PhCH2, linear or branched C1-6 alkyl, C3-7 cycloalkyl; R4-R7 = H, linear or branched C1-6 alkyl, C1-6 alkoxy, Ph, halo, NO2, cyano, etc.], esp. useful in treating CNS conditions sensitive to excitatory **amino acids**. To a stirred soln. of diketone II (R1 = H, Z = O) in DMF was added 55% NaH in mineral oil, followed by MeI with stirring at room temp. to give II (R1 = Me, Z = O), which was treated with MeONH2.HCl and Na2CO3 at room temp. to give oxime II (R1 = Me, Z = MeON). Also prepd. were 54 addnl. I which were effective in treating CNS disorders at 30-100 mg/day.

IT 136622-60-1P 136622-61-2P 136622-65-6P
 136622-68-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and reaction of, in prepn. of central nervous agent)

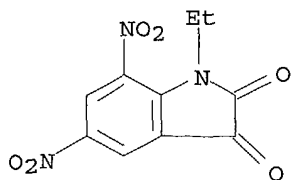
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



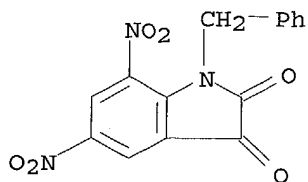
RN 136622-61-2 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)



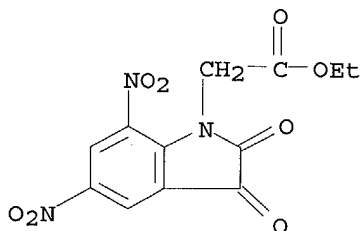
RN 136622-65-6 CAPLUS

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 136622-68-9 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

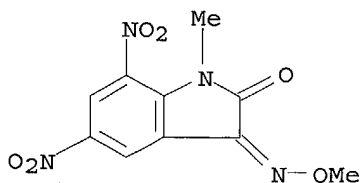


IT 136622-70-3P 136622-72-5P 136622-80-5P
136622-84-9P 136622-85-0P 136622-90-7P
136623-03-5P 136623-07-9P 136623-08-0P
136623-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as central nervous agent)

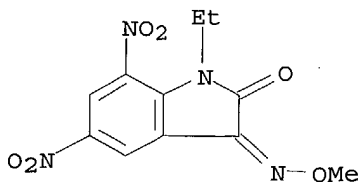
RN 136622-70-3 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-(O-methyloxime) (9CI) (CA INDEX NAME)



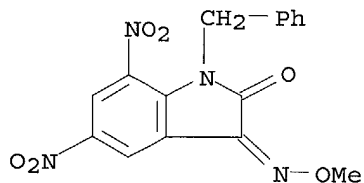
RN 136622-72-5 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro-, 3-(O-methyloxime) (9CI) (CA INDEX NAME)

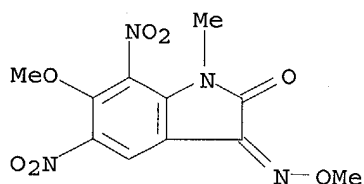


RN 136622-80-5 CAPLUS

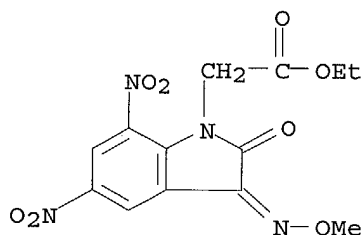
CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)-, 3-(O-methyloxime)
(9CI) (CA INDEX NAME)



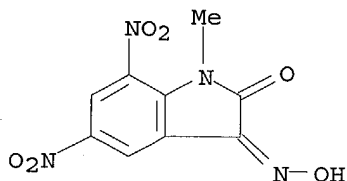
RN 136622-84-9 CAPLUS
CN 1H-Indole-2,3-dione, 6-methoxy-1-methyl-5,7-dinitro-, 3-(O-methyloxime)
(9CI) (CA INDEX NAME)



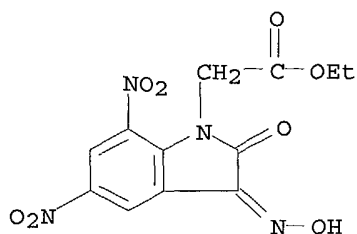
RN 136622-85-0 CAPLUS
CN 1H-Indole-1-acetic acid, 2,3-dihydro-3-(methoxyimino)-5,7-dinitro-2-oxo-,
ethyl ester (9CI) (CA INDEX NAME)



RN 136622-90-7 CAPLUS
CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-oxime (9CI) (CA INDEX NAME)

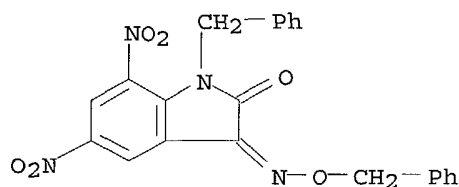


RN 136623-03-5 CAPLUS
CN 1H-Indole-1-acetic acid, 2,3-dihydro-3-(hydroxyimino)-5,7-dinitro-2-oxo-,
ethyl ester (9CI) (CA INDEX NAME)



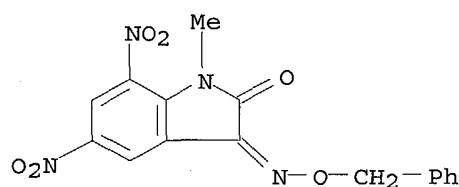
RN 136623-07-9 CAPLUS

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)



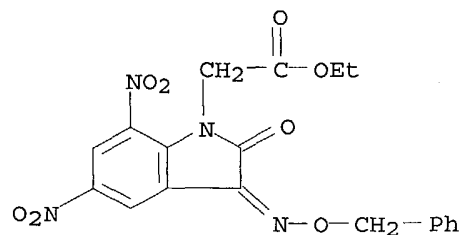
RN 136623-08-0 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)



RN 136623-09-1 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2-oxo-3-[(phenylmethoxy)imino]-, ethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1978:191454 CAPLUS

DOCUMENT NUMBER: 88:191454

TITLE: Synthesis of protected peptide acids and esters by photosolvolysis of 1-peptidyl-5-bromo-7-nitroindolines

AUTHOR(S): Goissis, Gilberto; Erickson, Bruce W.; Merrifield, R.

CORPORATE SOURCE:
SOURCE:

B.
Rockefeller Univ., New York, NY, USA
Pept., Proc. Am. Pept. Symp., 5th (1977), 559-61.
Editor(s): Goodman, Murray; Meienhofer, Johannes.
Wiley: New York, N. Y.
CODEN: 37OBAT

DOCUMENT TYPE:

Conference

LANGUAGE:

English

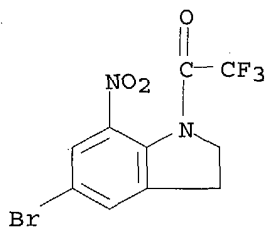
AB Me3CO2C-Gly-Val-Bni (I, Bni = 5-bromo-7-nitro-4-indolyl) and Me3CO2C-Leu-Ala-Bni (II) were prepd. in 45-50% yields. Indoline was treated with Me3CO2CNHCHRCO2H (R = Me, CHMe2) to give Me3CO2CNHCHRCOR1 (R1 = 1-indoliny1) which was treated with CF3CO2H, brominating, and nitrating to give CF3CONHCHRCOBni which was deacylated and coupled with the appropriate **amino acid** deriv. to give I or II. The photolysis of I and II in aq. CH2Cl2-dioxane gave 80-1% of Me3CO2C-Gly-Val-OH and Me3CO2C-Leu-Ala-OH. The photolysis in PhCH2OH gave a mixt. of peptide acid and ester.

IT 66414-97-9 66414-98-0 66414-99-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(photolysis of)

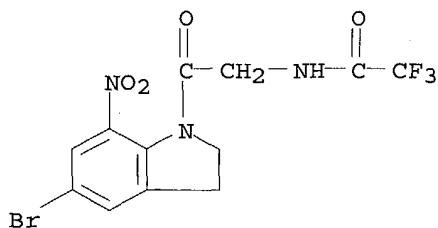
RN 66414-97-9 CAPLUS

CN 1H-Indole, 5-bromo-2,3-dihydro-7-nitro-1-(trifluoroacetyl)- (9CI) (CA INDEX NAME)



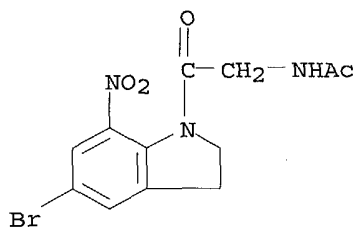
RN 66414-98-0 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-2-oxoethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)



RN 66414-99-1 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



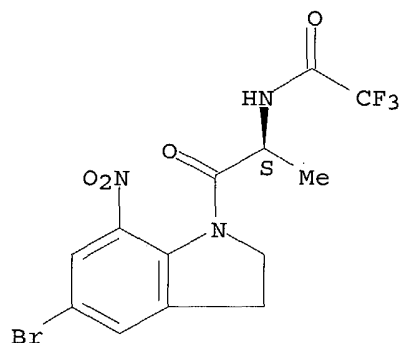
IT 66414-92-4P 66517-34-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deacylation of)

RN 66414-92-4 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-1-methyl-2-oxoethyl]-2,2,2-trifluoro-, (S)- (9CI) (CA INDEX NAME)

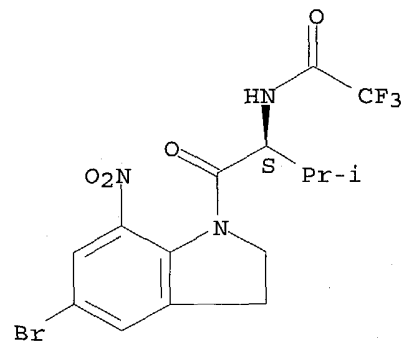
Absolute stereochemistry.



RN 66517-34-8 CAPLUS

CN Acetamide, N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-2,2,2-trifluoro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 66414-93-5P 66414-94-6P 66415-03-0P

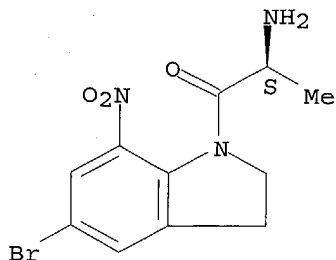
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and peptide coupling with)

RN 66414-93-5 CAPLUS

CN 1H-Indole, 1-(2-amino-1-oxopropyl)-5-bromo-2,3-dihydro-7-nitro-, (S)-

(9CI) (CA INDEX NAME)

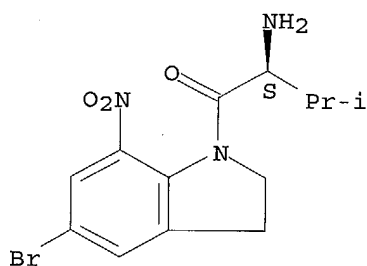
Absolute stereochemistry.



RN 66414-94-6 CAPLUS

CN 1H-Indole, 1-(2-amino-3-methyl-1-oxobutyl)-5-bromo-2,3-dihydro-7-nitro-,
(S)- (9CI) (CA INDEX NAME)

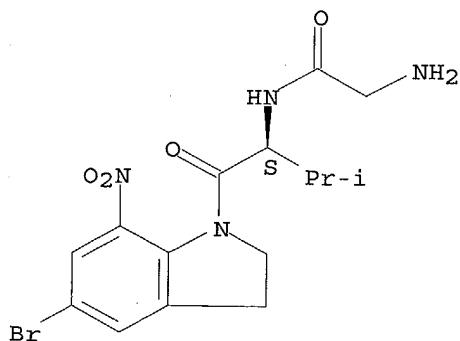
Absolute stereochemistry.



RN 66415-03-0 CAPLUS

CN Acetamide, 2-amino-N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

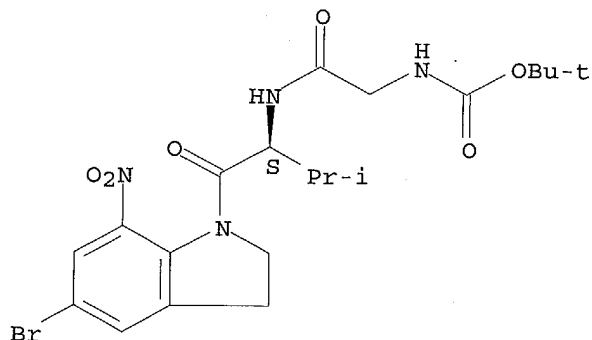


IT 66414-95-7P 66414-96-8P 66415-04-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and photolysis of)

RN 66414-95-7 CAPLUS

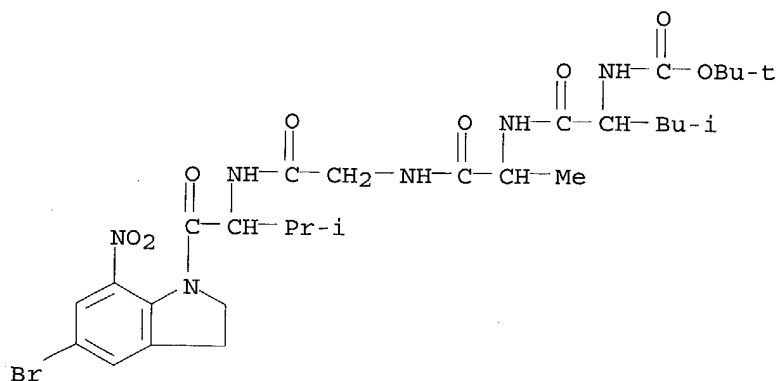
CN Carbamic acid, [2-[[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester,
(S)- (9CI) (CA INDEX NAME)



CN Carbamic acid, [1-[[[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-1-methyl-2-oxoethyl]amino]carbonyl]-3-methylbutyl]-, 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

CC(C)SC(=O)NC(=O)C(S)C(=O)N1CCc2cc(Br)cc([N+](=O)[O-])c2N1

CN Glycinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl-L-alanyl-N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-, (S)-(9CI) (CA INDEX NAME)



=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

95.99

244.35

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-12.37

-12.37

STN INTERNATIONAL LOGOFF AT 10:21:27 ON 13 AUG 2003